

# EXHIBIT A



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 Washington, DC 20037-1701

EXAMINER

KE, PENG

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/014,798 .

PATENT UNDER REEXAMINATION 6922728 .

ART UNIT 3992 .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

<b>Order Granting Request For Ex Parte Reexamination</b>	<b>Control No.</b> 90/014,798	<b>Patent Under Reexamination</b> 6922728	
	<b>Examiner</b> PENG KE	<b>Art Unit</b> 3992	<b>AIA (FITF) Status</b> No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 07/13/2021 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) ☒ PTO-892, b) ☐ PTO/SB/08, c) ☐ Other: \_\_\_\_\_

1. ☒ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

/P.K/  
Primary Examiner, Art Unit 3992

cc:Requester ( if third party requester )

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*Detail Action*

1. On 7/13/21, Third Party Requester ("Requester") filed a request ("Request") for 90/014,798 *ex parte* reexamination of claims 1-7, 9-15, and 17-21 of US Patent 6,922,728 issued to Cho ("the '728 patent") which was filed on 12/18/2001 as application 10/024,895 (" '895 application").
2. The Request is **Granted**.

*Concurrent Proceeding*

3. A concurrent 90/014,808 *ex parte* reexamination of 1-7, 9-15, and 17-21 of US Patent 6,922,728 has been filed on 7/19/21.
4. 2:20-cv-281 Kaifi LLC v. T-Mobile U.S. Inc. Eastern District of Texas (Ongoing)
5. 2:20-cv-280 Kaifi LLC v. Verizon Com. Inc. Eastern District of Texas (Ongoing)

*REFERENCES*

6. Prior Art References cited:
  - i. U.S. Patent No. 6,922,559 to Mohammed that has a priority claim to 2/26/21, (Mohammed) is new art that provides new, non-cumulative technological teaching that were not previously considered and discussed on the record during the prosecution of '728 Patent.
  - ii. U.S. Patent No. 6,243,581 to Jawanda that has a priority claim to 12/11/1998, (Jawanda) is new art that provides new, non-cumulative technological teaching that were not previously considered and discussed on the record during the prosecution of '728 Patent.

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iii. N.Nikolaou et al., “Wireless Technologies Convergence: Results and Experience”

(“Nikolaou”), is new art that provides new, non-cumulative technological teaching that were not previously considered and discussed on the record during the prosecution of ‘728 Patent.

iv. U.S. Patent No. 7,120,129 to Ayyagari that has a priority claim to 03/13/2001, (Ayyagari) is new art that provides new, non-cumulative technological teaching that were not previously considered and discussed on the record during the prosecution of ‘728 Patent.

v. RFC 2002- “IP Mobility Support” by C. Perkins (“RFC 2002”) is new art that provides new, non-cumulative technological teaching that were not previously considered and discussed on the record during the prosecution of ‘728 Patent..

7. It is noted that the prior art applied may only consist of prior art patents or printed publications; and any document that falls outside of these two categories will not be considered as prior art reference. See MPEP 2217.

### ***PROSECUTION HISTORY***

8. During the prosecution of Patent ‘728 (Application ‘875), the notice of allowance, issued on 3/15/05, was the first action issued by the office after the application was filed on 12/18/2001.

9. The notice of allowance 3/15/05 cited the entirety of claim 1 as the reason for the allowance:

10. “an internet network connecting and roaming system providing internet communication service to a data communication terminal of a user moving indoors or outdoors, using an outdoor wireless internet network including an antenna, a router and a location register, and an

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indoor network including an indoor gateway connectable with an inter network the system comprising:

A data communication terminal that includes an indoor wireless connection module and stores registered indoor system ID information, so that the data communication terminal may be connected with the indoor network if the registered indoor system ID information is received and by connecting with the outdoor wireless internet network if the registered indoor system ID information is not received;

An indoor gateway that includes an indoor wireless connection module therein, broadcasts the indoor system ID information, makes wireless communication with the data communication terminal through the indoor wireless connection module, and is connected with the internet network via a wire;

A location register that stores location information of the data communication terminal received through the indoor network or outdoor wireless internet network; and

A router that determines the location of the data communication terminal stored in the location register and provides roaming of voice /data signals provided to the user by selecting one of the indoor and the outdoor networks in accordance with the determined location of the data communication terminal.”

### **Substantial New Question of Patentability**

11. Because the prosecution history does not provide a specific limitation as the reason of patentability other than the entirety claim 1, the following italicized sections of claim 1 and claim 12 below are utilized by the examiner to show how specific teachings of the proposed references create a substantial new question of patentability.

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12. Claim 1 a computer-implemented method comprising:

an internet network connecting and roaming system providing internet communication service to a data communication terminal of a user moving indoors or outdoors, using an outdoor wireless internet network including an antenna, a router and a location register, and an indoor network including an indoor gateway connectable with an inter network the system comprising:

*A data communication terminal that includes an indoor wireless connection module and stores registered indoor system ID information, so that the data communication terminal may be connected with the indoor network if the registered indoor system ID information is received and by connecting with the outdoor wireless internet network if the registered indoor system ID information is not received;*

*An indoor gateway that includes an indoor wireless connection module therein, broadcasts the indoor system ID information, makes wireless communication with the data communication terminal through the indoor wireless connection module, and is connected with the internet network via a wire;*

A location register that stores location information of the data communication terminal received through the indoor network or outdoor wireless internet network; and

A router that determines the location of the data communication terminal stored in the location register and provides roaming of voice /data signals provided to the user by selecting one of the indoor and the outdoor networks in accordance with the determined location of the data communication terminal.



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13. Claim 12 An internet network connecting and roaming method for providing internet communication service to a data communication terminal of a user moving indoors or outdoors using an outdoor wireless internet network including an antenna, a router and a location register, and an indoor network including an indoor gateway connectable with an internet network, the method comprising:

*a first step of providing the user with a communication service by connecting with the outdoor wireless internet network when the user is located outdoors;*

*a second step of determining whether when indoor system ID information is received by the data communication terminal and the received indoor system ID information is identical to indoor system ID information stored in the location register;*

*a third step of going through authentication of an indoor location of the data communication terminal by the location register and storing the indoor location into the location register if it is determined in the second step that the two of ID information are equal to each other;*

*a fourth step of connecting with the internet network by switching connection of the data communication terminal from the outdoor wireless internet network to the indoor gateway and making wireless communications through the indoor gateway and an indoor wireless connection module;*

*a fifth step of, when the data provided from the internet network in accordance with location information stored in the location register are transferred to the indoor gateway, supplying the data communication terminal with the data through the indoor gateway and the indoor wireless connection module;*

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a sixth step of going through authentication of an outdoor location of the data communication terminal by the location register and storing the outdoor location into the location register when the indoor system ID information is not received; and a seventh step of switching the connection of the data communication terminal from the indoor gateway to the outdoor wireless internet network and performing the first step again.

### **Issue I**

#### *Mohammed*

**14.** Mohammed teaches the control and coordination of subscriber device and the unlicensed wireless communication base station. The Request shows that Mohammed teaches following limitations of claim 1 in '728 patent:

*A data communication terminal that includes an indoor wireless connection module and stores registered indoor system ID information, so that the data communication terminal may be connected with the indoor network if the registered indoor system ID information is received and by connecting with the outdoor wireless internet network if the registered indoor system ID information is not received; (1:48-55; 4:15-17; 8:65-10:20)*

*An indoor gateway that includes an indoor wireless connection module(8:20-40) therein, broadcasts the indoor system ID information, (6:38-62) makes wireless communication with the data communication terminal through the indoor wireless connection module, and is connected with the internet network via a wire; (1:25-55)*

And claim 12 in '728 patent:

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*a first step of providing the user with a communication service by connecting with the outdoor wireless internet network when the user is located outdoors; (8:20-40; 6:38-62; 1:25-55)*

*a second step of determining whether when indoor system ID information is received by the data communication terminal (1:48-55; 4:15-17; 8:65-10:20) and the received indoor system ID information is identical to indoor system ID information stored in the location register; (4:7-15; 4:50-61)*

It is agreed that Mohammed raises an SNQ as to at least claims 1 and 12 of '728 patent as pointed out above. There is a substantial likelihood that a reasonable examiner would consider the teachings of Mohammed important in deciding whether or not claims 1 and 12 are patentable.

## Issue II

### *Jawanda & Ayyagari et al.*

**15.** Jawanda teaches a seamless roaming method between wireless communication networks with a mobile terminal. Ayyagari teaches a configuration system that allows user to switch between wireless and wired networks. The Request shows that the combination of Jawanda and Ayyagari teaches following limitations of claim 1 in '728 patent:

*A data communication terminal that includes an indoor wireless connection module and stores registered indoor system ID information,(Ayyagari teaches ID information 9:20-29) so that the data communication terminal may be connected with the indoor network if the registered indoor system ID information is received and by connecting with the outdoor wireless internet network if the registered indoor system ID information is not received; (Ayyagari 15:54-16:11; Jawanda teaches roaming between communication network 3:1-6:10)*

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*An indoor gateway that includes an indoor wireless connection module (Jawanda 3:1-6:10) therein, broadcasts the indoor system ID information, (Ayyagari 15: 54-16:11) makes wireless communication with the data communication terminal through the indoor wireless connection module, and is connected with the internet network via a wire; (Ayyagari 7:40-60)*

And claim 12 in '728 patent:

*a first step of providing the user with a communication service by connecting with the outdoor wireless internet network when the user is located outdoors; (Ayyagari teaches ID information 9:20-29; Ayyagari 15: 54-16:11; Jawanda teaches roaming between communication network 3:1-6:10)*

*a second step of determining whether when indoor system ID information is received by the data communication terminal ,(Ayyagari teaches ID information 9:20-29; Ayyagari 15: 54-16:11) and the received indoor system ID information is identical to indoor system ID information stored in the location register; (Ayyagari 14:52-64)*

It is agreed that the combination of Jawanda and Ayyagari raises an SNQ as to at least claims 1 and 12 of '728 patent as pointed out above. There is a substantial likelihood that a reasonable examiner would consider the teachings of Jawanda and Ayyagar important in deciding whether or not claims 1 and 12 are patentable.

### Issue III

#### *Nikolaou & Ayyagari et al.*

**16.** Nikolaou teaches a seamless switching two wireless network. Ayyagari teaches a configuration system that allows user to switch between wireless and wired networks. The Request

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shows that the combination of Nikolaou and Ayyagari teaches following limitations of claim 1 in '728 patent:

*A data communication terminal that includes an indoor wireless connection module and stores registered indoor system ID information, (Ayyagari teaches ID information 9:20-29) so that the data communication terminal may be connected with the indoor network if the registered indoor system ID information is received and by connecting with the outdoor wireless internet network if the registered indoor system ID information is not received; (Ayyagari 15: 54-16:11; Nikolaou p569)*

*An indoor gateway that includes an indoor wireless connection module (Nikolaou p569 and 570) therein, broadcasts the indoor system ID information, (Ayyagari 15: 54-16:11) makes wireless communication with the data communication terminal through the indoor wireless connection module, and is connected with the internet network via a wire; (Ayyagari 7:40-60)*

And claim 12 in '728 patent:

*a first step of providing the user with a communication service by connecting with the outdoor wireless internet network when the user is located outdoors; (Ayyagari teaches ID information 9:20-29; Ayyagari 15: 54-16:11; Nikolaou p569)*

*a second step of determining whether when indoor system ID information is received by the data communication terminal, (Ayyagari teaches ID information 9:20-29; Ayyagari 15: 54-16:11) and the received indoor system ID information is identical to indoor system ID information stored in the location register; (Ayyagari 14:52-64)*

It is agreed that the combination of Nikolaou and Ayyagari raises an SNQ as to at least claims 1 and 12 of '728 patent as pointed out above. There is a substantial likelihood that a

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reasonable examiner would consider the teachings of Nikolaou and Ayyagar important in deciding whether or not claims 1 and 12 are patentable.

#### **Issue IV**

##### ***Mohammed, Jawanda, Nikolaou, Ayyagari, and RFC 2002***

**17.** Requester asserts a substantial new question of patentability to the claims 1-3, 7, 9-15, and 17-21 as being obvious over the combined teaching of Mohammed and Ayyagari; claims 4-6 as being obvious over Mohammed, Ayyagari and RFC 2002; Claims 1-7, 9-15, and 17-21 as being obvious over Jawanda, and Ayyagari; Claims 1-4, 6-7, and 9-11 as being obvious over Nikolaou and Ayyagari; and Claims 5, 12-15, and 17-21 being obvious over Nikolaou, Ayyagari and RFC 2002. A substantial new question of patentability with respect to independent claims 1 and 12 have been established. (see Issue I-III above). According, it is agreed that the combinations proposed above raise a substantial new question of patentability with respect to claims 1-7, 9-15, and 17-21 because claims 2-7 and 9-11 are depended on claim 1; and claims 13-15 and 17-21 are depended on claim 12.

##### ***Scope of Reexamination***

**18.** Claims 1-7, 9-15, and 17-21 will be reexamined as requested in the Request and are hereby Ordered.

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*Conclusion*

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c).

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 6,922,728 throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

All correspondence relating to this ex parte reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop Ex Parte Reexam  
ATTN: Central Reexamination Unit Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

By FAX to:  
(571) 273-9900  
Central Reexamination Unit

By hand to:  
Customer Service Window  
Randolph Building  
401 Dulany St.  
Alexandria, VA 22314

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Any inquiry concerning this communication or earlier communications from the Reexamination

Legal Advisor or Examiner, or as to the status of this proceeding, should be directed to the

Central Reexamination Unit at telephone number (571) 272-7705.

/PENG KE/

Primary Examiner, Art Unit 3992

Conferees:

/William H. Wood/

Primary Examiner, Art Unit 3992

/HBP/